## **IN THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended) A method of machine-readable form pre-recognition analysis comprising

a filled in form image,

at-least-one-form-model-description, containing-spatial-and-parametric-properties-of-at-least-one element of the said form.

processing at least the following steps:

preliminarily assigning at least one form object as an olement of a graphic image for identification of image direction of a spatial orientation of a form image.

preliminarily creating at least one <u>spatial orientation</u> model of the said graphic image for identification of <u>image direction of the spatial orientation of the form image</u>,

parsing the form image into regions.

determining the spatial orientation of the form image, comprising: form image spatial orientation direction verification, comprising at least the following steps:

(a) detecting on the form image at least one element composing the graphic image for identification of the spatial orientation of the form image the image spatial orientation verification.

performing the said graphic image identification attempt to verify (b) determining the spatial orientation of the form image based on a comparison of the detected graphic image with if the direction of the image agrees with that of the spatial orientation model,

performing graphic image turn from the current position to the preliminarily assigned direction on angle (c) rotating the form image by 90°; and further returning to the previous step in the repeating step (c) case of the image identification reliability level on the previous step being lower then the predetermined level thereof; in the case of said comparison between the detected graphic image and the spatial orientation model yielding a match that is below a predetermined level.

 (Currently Amended A method of machine-readable form pre-recognition analysis comprising

## a filled in form image,

at least one form model description, containing spatial and parametric properties of at least one element of the said form,

## processing at least the following steps:

preliminarily assigning at least one form object as an element of graphic image in a form for identification of an image form type,

preliminarily creating at least one model of the said graphic image for identification of the image form type,

parsing the form image into regions,

determining an image form type for an image form, comprising: form image type definition, comprising at least the following steps:

- (a) detecting on the form image form at least one element composing the graphic image for identification of the image form type form type definition,
- (b) performing a primary identification of the image form type based on a comparison of the detected graphic image using with the said model, and
- (c) performing a profound analysis using a supplementary data <u>if in a case of multiple</u> identification result of the said-primary identification <u>results in multiple possibilities</u> for the image form type.
- 3. (Currently Amended) The method as recited in claim 1, wherein the direction of determining the spatial orientation verification is performed via comprises setting up and examining of hypotheses and the corresponding matching reliability estimations.
- 4. (Currently Amended) The method as recited in claim 2, wherein determining the image form type comprises the form type definition is performed via setting up and examining of hypotheses and the corresponding matching reliability estimations
- 5. (Currently Amended) The method as recited in claim 4.2, wherein determining the image form type the step of the form type identification is performed using a minimum possible set of objects, defining the form type.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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6. (Currently Amended) The method as recited in claims 1 or 2, wherein the at least one form object

comprising the assigned as a graphic image, is represented by comprises a non-text image.

7. (Currently Amended) The method as recited in claims 1 and or 2, wherein the at least one form object

comprising the assigned as a graphic image, is represented by comprises a text image.

8. (Currently Amended) The method as recited in claim 7, wherein the text the in said text image is

additionally recognized before the analysis as a first step in the pre-recognition analysis.

9. (Currently Amended) The method as recited in claim 8, wherein the contents of the recognized text is

used as an supplementary data in a form type definition process.

10. Cancelled

11. (Currently Amended) The method as recited in claims 1 and or 2, wherein the at least one object

comprising the graphic image, is represented by assigning comprises assigning a group of form objects of

graphic images.

12. (Currenly Amended) The method as recited in claim 6, wherein the at least one element comprising

the graphic image is form object comprises an the element of empty region type.

13. (Currently Amended) The method as recited in claim 6, wherein the at least one form object graphie

object comprising the graphic image is is of dividing line type.

14. (Currently Amended) The method as recited in claim 2, wherein the profound analysis comprises at

least

- assigning on the form image at least one supplementary form element,

- creating of a profound analysis model using the said model of the said graphic image for

preliminarily identification of the image form type plus at least one said supplementary assigned form

element; and

- performing a profound analysis of the form image using the said profound analysis model.

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## 15. Cancelled

- 16. (Currenlty Amended) The method as recited in claims 11 1 or 2, wherein the entire group of graphic images is used for determining the spatial orientation whole set of form objects is used to compose the graphic image for the direction of spatial orientation verification or for the form type-definition.
- 17. Cancelled.
- 18. (Currently Amended) The method as recited in claim[[s]] 1 or 2, wherein the said special spatial orientation model description is stored in the description of the a form model description.
- 19. (Currenlty Amended) The method as recited in claims 1 or 2, wherein the at least one said form object, comprising the said graphic image is described in a form of an alternative.